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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/566,961	01/27/2006	Toshiyuki Oga	P/1878-195	9225
2352 7590 01/21/2009 OSTROLENK FABER GERB & SOFFEN 1180 AVENUE OF THE AMERICAS NEW YORK, NY 100368403				
EXAMINER				
SHEDRICK, CHARLES TERRELL				
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2617				
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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

# Office Action Summary

**Application No.**

10/566,961

**Applicant(s)**

OGA, TOSHIYUKI

**Examiner**

CHARLES SHEDRICK

**Art Unit**

2617

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 08 January 2009.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-9 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-9 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SF/ICE)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

## DETAILED ACTION

### *Continued Examination Under 37 CFR 1.114*

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(c), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(c) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 1/08/09 has been entered.

### *Response to Arguments*

2. Applicant's arguments filed 1/8/09 have been fully considered but they are not persuasive.

Claim 1, The Examiner respectfully notes that based on the claim language and the Applicants remarks, the distinctions between Tomohide and the claim language has not been made clear. In an effort to further clarify the Examiner's interpretation the following comparison is shown with regard to at least the Patent abstract of Tomohide et. al. (Currently Amended)

A mobile information terminal comprising

- Claim language: a display device having a display surface disposed on a front surface;

Tomohide: teaches a keyboard arranged on the rear face side of the display device one.

Examiner note: If the keyboard is arranged on the rear surface then the display is on the front surface.

- Claim language: a plurality of operation keys disposed on a rear surface located on a reverse side of the front ~~opposite to a~~ surface on which the display surface of said display device is disposed;

Tomohide: teaches a keyboard arranged on the rear face side of the display device one.

Examiner note: If the keyboard is arranged on the rear surface then the display is on the front surface. The keyboard is understood to have a plurality of operation keys, rear is understood to be the opposite of front.

- Claim language: a plurality of finger position detecting mechanisms for detecting that a finger of an operator is placed on each of said operation keys, and

Examiner note: at least the Keyboard is understood to have finger position detection mechanism in order to distinguish to keys.

- Claim language: a control section to which signals from said operation keys and said finger position detecting mechanisms are entered and which can control the operation of said display device.

Tomohide: teaches a display managing part for managing an image to be displayed on the display device corresponding to keyboard operations.

Examiner note: based on the input operation of a particular key (e.g., finger positioned on the letter 'A' versus 'B') a corresponding display is shown.

- Claim language: in said control section executes a processing operation to cause said display device to display an image showing the arrangement of said operation keys and to change an icon which is included in the image of said arranged operation keys and which corresponds to one of said operation keys on which the operator placed his/her finger when the control section determines, according to an input signal from said finger position detecting mechanisms, that the finger of the operator is placed on said one of operation keys.

Tomohide: teaches that the image to be managed by the display managing part includes a keyboard arrangement diagram, and that keyboard diagram arrangement shows the key arrangement observing the keyboard on the rear face from the front face side of the display device. The input device is provided with a feedback part for generating a feedback signal corresponding to the depressing state of the keyboard and the display managing part visually feeds the keyboard depressing state back to the user.

Examiners note: The Examiner is unable to find the distinction between the above noted comparisons. Therefore the rejection is maintained accordingly.

3. Since each of Claims 2-5 is directly or indirectly dependent upon independent Claim 1, each of Claims 2-5 are not allowable at least for the same reasons as Claim 1 and further on their own merits.
4. Claim 6 is directly dependent upon independent Claim 1, Claim 6 is not allowable for at least the same reasons recited above with respect to the allowability of independent Claim 1. Claim 8 is not allowable at least for the same reasons as Claim 1.
5. Applicant's arguments with respect to claims 7-9 have been considered but are moot in view of the new ground(s) of rejection.

***Claim Rejections - 35 USC § 102***

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1-5 are rejected under 35 U.S.C. 102(b) as being anticipated by Tomohide et al.  
JP Patent Pub. No.: 07-295720.

Consider **claim 1**, Tomohide, teaches a mobile information terminal comprises a display device having a display surface disposed on the front surface (e.g., see **remarks above in response to arguments**); a plurality of operation keys disposed on a rear surface located on a reverse side of the front surface on which the display surface of said display device is disposed (e.g., see drawing 1 and response to arguments above), finger position detecting mechanisms for detecting that a finger of an operator is placed on each of said operation keys (e.g., see **Japanese Patent Abstract, paragraphs 0016-0020**), and a control section to which signals from said operation keys and said finger position detecting mechanisms are entered and which can control the operation of said display device (e.g., see **Japanese Patent Abstract , see information processing section 4 and at least paragraph 0020**), wherein said control section executes a processing operation to cause said display device to display an image showing the arrangement of said operation keys and to change an icon which is included in the image of said arranged operation keys and which corresponds to one of said operation keys on which the operator placed his/her finger when the control section determines, according to an input signal from said finger position detecting mechanisms, that the finger of the operator is placed on said one of operation keys (e.g., see **Japanese Patent Abstract, see information processing section 4 and at least paragraphs 0016- 0020**).

Consider **claim 2** and as applied to a mobile information terminal according to **claim 1**, Tomohide teaches wherein each of said finger position detecting mechanisms includes a half-depressing sensor for detecting that each of said operation keys is half-depressed and/or includes

a touch sensor for detecting that the finger of the operator touches each of said operation keys (e.g., see **touch sensor 8 as noted in paragraph 0032**).

Consider **claim 3 and as applied to the mobile information terminal according to claim 1**, Tomohide teaches wherein executing the processing operation to change the icon that corresponds to one of said operation keys on which the finger of the operator is placed, is executed by changing at least one of a display color, a display figure, a display brightness, and a flickering pattern in the displayed icon (e.g., see **image processing noted in paragraph 0034**).

Consider **claim 4 and as applied to the mobile information terminal according to claim 1**, Tomohide teaches wherein said control section executes a processing operation to start or stop a predetermined program stored in advance when said control section determines(e.g., see **feedback part and information processing section paragraphs 0027-0031**), according to a signal from said finger position detecting mechanisms, that the finger of the operator is placed on a predetermined key of said operation keys, or when said control section determines, according to a signal from said finger position detecting mechanisms, that the finger of the operator is sequentially placed on some of said operation keys in a predetermined order(e.g., see **feedback part and information processing section paragraphs 0027-0031**).

Consider **claim 5 and as applied to the mobile information terminal according to claim 4**, Tomohide teaches wherein at least one processing operation to display a predetermined image on said display device or to stop the display, to display predetermined selection information on said display device, to turn the light of an illuminator on or off or to cause the illuminator to flicker, to generate or to halt a vibration of a predetermined pattern, to generate or stop a sound having a predetermined pattern, to connect the mobile information terminal to

another information processing apparatus, to which the mobile information terminal can be connected through a network, or to disconnect the connection, is executed by starting or by stopping said predetermined program (e.g., see **feedback part and information processing section paragraphs 0027-0031 and PAJ abstract**).

***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

5. Claims 6-9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tomohide et al. JP Patent Pub. No.: 07-295720 in view of Bogward US Patent Pub. No.: 20040049743 A1.

Consider Claim 6 and as applied to the mobile information terminal according to claim 1, Tomohide teaches the claimed invention except where it further comprising a gravity sensor for detecting whether gravity is applied in a direction from the front surface of said display device to the rear surface of said display device or whether gravity is applied in a



opposite direction from the rear surface of display device to the front surface of display device, wherein said control section executes a processing operation to change the assignment of key codes to said operation keys, in response to an input signal from said gravity sensor.

However, in analogous art Bogward teaches a gravity sensor for detecting whether gravity is applied in a direction from a side of said display surface of said display device to the opposite side or whether gravity is applied in the opposite direction (e.g., **opposite direction considered top to bottom and or left to right**) (see at least discussion of gravity sensor and switch in paragraphs 0327-0336), wherein said control section executes a processing operation to change the assignment of key codes to said operation keys, in response to an input signal from said gravity sensor(i.e., **key codes would follow from the control section recognizing the input from one region of the keyboard versus another region of the keyboard based on coded signals**)(see at least discussion of gravity sensor and switch in paragraphs 0327-0336).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify Tomohide to include a gravity sensor for detecting whether gravity is applied in a direction from a side of said display surface of said display device to the opposite side or whether gravity is applied in the opposite direction, wherein said control section executes a processing operation to change the assignment of key codes to said operation keys, in response to an input signal from said gravity sensor for the purpose of improving functionality of mobile devices as taught by Bogward. Furthermore, it would be appreciated by a person of ordinary skill in the art that the gravity sensor detects the general position based on a point of reference (i.e., up down right left top bottom).

Consider **claim 7**, Tomohide teaches a display device having a display surface disposed on the front surface (e.g., **see remarks above in response to arguments**); a plurality of operation keys on the rear surface of said display device (e.g., **see drawing 1 and response to arguments above**)

However, Tomohide does not specifically teach a gravity sensor operable for detecting whether gravity is applied in a direction from a front surface side of said display device a rear surface side or whether gravity is applied in the opposite direction, and a control section to which signals from said operation keys and said gravity sensor are entered and which can control the operation of said display device, wherein said control section operable to execute a processing operation to cause said display device to display an image showing the arrangement of said operation keys and a processing operation to change the assignment of key codes to said operation keys in response to an input signal from said gravity sensor.

In analogous art, Bogward teaches a gravity sensor for detecting whether gravity is applied from a front surface side of said display device to a rear surface side(**i.e., the gravity sensor detects the position of the device**), or whether gravity is applied in the opposite direction(**e.g., opposite direction considered top to bottom and or left to right**) (**see at least discussion of gravity sensor and switch in paragraphs 0327-0336**), and a control section to which signals from said operation keys and said gravity sensor are entered and which can control the operation of said display device(**e.g., see at least discussion of gravity sensor and switch in paragraphs 0327-0336**), wherein said control section executes a processing operation to cause said display device to display an image showing the arrangement of said operation keys and a processing operation to change the assignment of key codes to said operation keys in

response to an input signal from said gravity sensor (i.e., **key codes (i.e., signals) would follow from the control section recognizing the input from one region of the keyboard versus another region of the keyboard if the keypad displays are rotated based on coded signals**)(see at least discussion of gravity sensor and switch in paragraphs 0327-0336).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify Tomohide to include a gravity sensor operable for detecting whether gravity is applied in a direction from a front surface side of said display device a rear surface side or whether gravity is applied in the opposite direction, and a control section to which signals from said operation keys and said gravity sensor are entered and which can control the operation of said display device, wherein said control section operable to execute a processing operation to cause said display device to display an image showing the arrangement of said operation keys and a processing operation to change the assignment of key codes to said operation keys in response to an input signal from said gravity sensor for the purpose of improving functionality of mobile devices as taught by Bogward. Furthermore, it would be appreciated by a person of ordinary skill in the art that the gravity sensor detects the general position based on a point of reference.

Consider **claims 8 and 9 and as applied to the mobile information terminal according to claim 6 and 7 respectively**, Tomohide teaches the claimed invention except wherein the arrangement of the key codes assigned to said operation keys when gravity is applied in a direction from the front surface of said display device to rear surface of said display device is a mirror image of the arrangement of the key codes assigned to said operation keys when gravity is

applied in a direction from the rear side surface of said display device to the front surface of said display device.

However, In analogous art, Bogward teaches wherein the arrangement of the key codes assigned to said operation keys when gravity is applied in a direction from the front surface of said display device to rear surface of said display device is a mirror image of the arrangement of the key codes assigned to said operation keys when gravity is applied in a direction from the rear side (i.e., **side opposite to the side of the display surface**) of said display device to the front surface of said display device (i.e., **the gravity sensor detects the position of the device and assigns the key codes (i.e., signals) accordingly** )(see at least paragraph 0437 and claims 13-15).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify Tomohide to include wherein the arrangement of the key codes assigned to said operation keys when gravity is applied in a direction from the front surface of said display device to rear surface of said display device is a mirror image of the arrangement of the key codes assigned to said operation keys when gravity is applied in a direction from the rear side as taught by Bogward. Furthermore, it would be appreciated by a person of ordinary skill in the art that the gravity sensor detects the general position based on a point of reference (i.e., **left handed or right handed**).

#### ***Conclusion***

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. See form 892

Any inquiry concerning this communication or earlier communications from the examiner should be directed to CHARLES SHEDRICK whose telephone number is (571)272-8621. The examiner can normally be reached on Monday thru Friday 8:00AM-4:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Lester Kincaid can be reached on (571)-272-7922. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Charles Shedrick/  
Examiner, Art Unit 2617

/Lester Kincaid/  
Supervisory Patent Examiner, Art Unit 2617